



2 November 2016

Submission to the Queensland Renewable Energy Expert Panel re: Credible pathways to a 50% renewable energy target for Queensland Draft Report

Key Recommendations:

- **Enshrine the target in legislation.**
- **Plan for replacement of coal-burning power plants before 2030.**
- **Increase pre-2020 ambition above 400MW.**
- **Ensure the target has review cycles and the policies to achieve it are scalable so that the level of ambition can be increased over time to 100%.**
- **Pathway should meet the combined objectives of emissions reduction in line with achieving net zero carbon pollution before mid-century and ramping up in a sustainable way that builds a sustainable industry.**
- **Household scale renewables, community ownership and a range of technology options (including flexible, dispatchable energy sources) should be incentivised alongside private investment in large-scale wind and solar.**
- **Remove native forest wood waste from being an eligible renewable energy source under the Queensland renewable energy target.**

The ACF appreciates the opportunity to provide a submission to the Queensland Renewable Energy Expert Panel's *Credible pathways to a 50% renewable energy target for Queensland Draft Report*.

Introduction

The ACF congratulates the Expert Panel on its Draft Report. The three clear pathways modelled for the 50% target make it clear that this is an achievable target and that many of the issues that have been posed as barriers to the state's renewable energy ambition are not borne out through this analysis. Key points useful in this regard include that regardless of the pathway, this target will reduce climate pollution, provide thousands of jobs particularly in regional areas, contribute to growing the economy, offer additional opportunities in relevant supply chain industries including potential new exports and new business attraction, and be largely cost neutral to electricity consumers.

The ACF is particularly pleased to see the opportunities outlined in this report, the inclusion of reverse auctions as a key policy mechanism for supporting large-scale renewables, and recognition of the need to move from the current peak/baseload energy generation to variable and dispatchable renewables that provide clean, 'on demand' energy. Experts have acknowledged that a renewable energy grid that is more decentralised and includes complementary technologies such as battery storage, pumped hydro and solar thermal will provide a much more secure energy future than what we have today, particularly as climate change influences extreme weather.



Planning holistically and with a roadmap that progresses dispatchable energy sources where and as needed can move the state to a truly clean, secure, affordable energy future.

A further issue noted by the Draft Report is that supportive federal climate change and renewable energy policy could potentially provide substantial support to the state's achievement of their RET. Unfortunately, the federal government has recently criticised state governments for their leadership role in pursuing strong renewable energy agendas. This process and the panel's final report offer an opportunity to highlight the importance of the federal government taking stronger action to support states that are now leading Australia's transition to clean energy including to provide greater certainty about the national Renewable Energy Target (RET) scheme post-2020.

Need to legislate

Enshrining the 50% target in legislation adds an important level of commitment and certainty. Achieving this target will require investment and lack of certainty will impact investor decisions. Legislation will also bind current and future governments, requiring legislative action to amend or dismantle.

Scalability

Queensland and Australia as a whole will need to achieve net zero carbon pollution well before 2050 to meet our commitments under the Paris Climate Agreement and more broadly to do our share in keeping global warming to less than 2°C. The state government's renewable energy target should be considered a key part of their climate strategy and serve to achieve decarbonisation objectives, thus it should be able to ramp up over time from 50% to 100%, which will be necessary to achieve net zero carbon pollution. The ACF recommends that the target has review cycles that allow for it to be ratcheted up over time and the policy toolkit to achieve it is scalable so that it can adjust as the level of ambition is increased.

Further, in addition to large-scale solar and wind (which are needed), transitioning to and beyond 50% will require a range of additional technologies that may not currently be least cost (e.g., sustainable bio energy and pumped hydro). It will also require supporting community energy and household scale solutions. Low income households and renters need to have access to renewable energy and energy efficiency, and public/community ownership prevalent in leading countries like Denmark needs to be enabled. Policy should certainly incentivize private ownership, but should also extend to public/community ownership.

Increase pre-2020 ambition above 400MW

Jurisdictions that move quickly on driving the growth of renewable energy are likely to capture more of the economic benefits of this industry. This is true from both a national and an international perspective. Globally, it has been estimated that US\$28 trillion will be invested in renewable energy and energy efficiency before 2035. The countries that move first to capture that



investment will reap the greatest benefits. The latest International Energy Agency (IEA) Medium Term Renewable Energy Report confirmed that this growth is happening now.

“The rapid spread of renewable energy is a bright spot in the global energy transition toward a low carbon economy. Despite lower fossil fuel prices, renewable power expanded **at its fastest-ever rate in 2015**, thanks to supportive government policies and sharp cost reductions. Renewables accounted for more than half of the world’s additional electricity capacity last year.”

This report examines these questions in detail, looking closely at how renewable energy in the power, heat and transportation sectors will evolve over the next five years in the face of lower fossil fuel prices. It explores recent renewable deployment and policy trends across different regions and countries, particularly as costs for wind and

High ambition is evident elsewhere, including in other states in Australia. Increasing the pre-2020 target would send stronger, earlier investment signals about the state’s intentions to grow the industry and set Queensland up to capture a greater proportion of the market share to be delivered by the national RET.

Queensland has an opportunity to position itself as the state leading the development of the large-scale solar industry. Large-scale solar has enormous opportunity for growth in Australia, and Queensland has a competitive advantage with an exceptional solar resource that is close to existing transmission lines. Leadership cannot be achieved through delay. A plan to aggressively support large-scale solar early (e.g., through reverse auctions pre-2020), would help to position the state as an attractive destination to grow the large-scale solar supply chain.

Pathways

The 3 pathways modelled in the draft report provide a useful comparison. The ACF is of the view that the best pathway is one that is consistent with objectives of emission reduction in line with achieving net zero carbon pollution before mid-century and ramping up in a sustainable way that builds a sustainable industry. Strong federal climate policy would be very helpful and should also be pursued, but in the absence of that guarantee the state should prepare to maximise benefit and minimise cost of its renewable energy target.

Coal replacement and just transitions

It is important that Queensland plans for replacement of coal-burning power plants before 2030. Queensland will not be exempt from the global and national energy transformation required to meet climate change objectives. That will require replacement of coal-burning power plants with 100% clean, renewable energy by 2035. Without a plan for coal replacement there will be no transition plan for impacted workers and communities, and limited investment signals to help



drive this transition. Given the high public ownership of coal plants in Queensland, the Government has the ability to take generators offline before they reach or exceed their useful lifespan (about 40 years). Gladstone, for example, should be considered for early closure.

The ACF is strongly of the view that the federal government needs a national plan for coal retirement but recent experience in South Australia and Victoria has shown that coal retirements are already underway and although Queensland has a relatively newer and more efficient coal-burning power fleet than other states, those facilities are still big carbon emitters and will not have a place in a future clean energy system. Planning now will ease the transition and support the state's clean energy agenda by signalling the transition for investors.

Eligible renewable energy sources

The Panel recommended that Queensland adopt the same set of eligible renewable energy sources as identified under the Federal LRET, on the basis that this is considered an extensive and well understood list of renewable energy sources. Adopting this approach would also ensure that a Queensland target remains consistent with the Federal LRET in terms of renewable energy sources.

The Renewable Energy Target was amended in 2015 and through the amendment process biomass from native forest wood waste was reinstated as an eligible source of renewable energy. The ACF does not support inclusion of native forest wood waste as an eligible renewable energy source under the LRET or under the Queensland RET. There are [multiple reasons](#) for this view including that it will restrict the uptake of real renewables like solar and wind, logging and burning of native forests releases a lot of carbon pollution, native forests are more valuable intact sequestering large stores of carbon, inclusion native forest biomass will drive deforestation and the conservation values of Australia's native forests are already under threat. In addition, there is currently no clear or agreed process for assessing the sustainability of native forest wood waste. Its inclusion therefore adds further concern about verification processes necessary to ensure biomass used to generate energy comes from sustainably managed forests.

Energy efficiency

Energy efficiency should be a complementary policy pursuit alongside the renewable energy policy toolkit, to both reduce overall demand and to assist low income households by reducing their electricity use and thus their electricity bills.

For more information:

Suzanne Harter | Climate Change and Clean Energy Campaigner | P: 03 9345 1208 |

E: S.Harter@acfonline.org.au

The ACF community speaks out for a healthy environment, Australia's special places, climate action and for lasting social and economic change.

www.acfonline.org.au